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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,168	06/22/2006	Eric Labarriere	12928/10035	4749
23280	7590	04/07/2010		
Davidson, Davidson & Kappel, LLC			EXAMINER	
485 7th Avenue			PALABRICA, RICARDO J	
14th Floor				
New York, NY 10018				
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/584,168

Applicant(s)

LABARRIERE ET AL.

Examiner

Rick Palabrica

Art Unit

3663

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/18/10 Amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24, 26-33 and 35-48 is/are pending in the application.
- 4a) Of the above claim(s) 29, 38 and 41-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24, 26-28, 30-33, 35-37, 39, 40, 47, and 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Drafts/Person's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicant's 2/1/10 Amendment, which directly amended claims 24, 26-33, 35-40 and 48, is acknowledged. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 24, 26-28, 30, 35-37, 39, 47 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by Freeman et al. (U.S. 4,655,995).

As to claim 24, applicant's claim language reads on Freeman et al. as follows (see Fig. 2): a) "lower terminal end piece" reads on lower tie plate 106; b) "noses" reads on the conical extension below the cylindrical elements of the tie plate.

Note that the: a) lower tie plate has a top side and a bottom side that is opposite the top side; b) noses are arranged in the nodes of the substantially regular network; c) noses project from the bottom side of the lower tie plate and converge to be narrower in the direction of the top side towards the bottom side of the lower tie plate.

The claims are replete with statements that are either essentially method limitations or statements of intended or desired use. For example, "for a fuel assembly

of a pressurized water nuclear reactor ..." (claim 24), "for facing the fuel rods" (claim 24), "in order to be positioned in a longitudinal direction ..." (claim 24), "to be narrower than the diameter of the fuel rods ..." (claim 24), "for fixing the lower terminal end piece to one of the guide tubes ..." (claim 26), "for a pressurized water nuclear reactor" (claim 36), etc. These clauses, as well as other statements of intended use do not serve to patently distinguish the claimed structure over that of the reference, as long as the structure of the cited references is capable of performing the intended use. See MPEP 2111-2115.

See also MPEP 2114 that states:

A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647.

Claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In re Danly, 263 F.2d 844, 847, 120 USPQ 528, 531.

[A]pparatus claims cover what a device is, not what a device does." Hewlett-Packard Co. v. Bausch & Lomb Inc., 15 USPQ2d 1525, 1528.

As set forth in MPEP 2115, a recitation in a claim to the material or article worked upon does not serve to limit an apparatus claim.

The system in the cited reference is capable of being used in the same manner and for the intended or desired use as the claimed invention. Note that it is sufficient to show that said capability exists, which is the case for the cited reference.

As to claims 26 and 27, the limitations associated with "fixing the lower terminal end piece" are parts of the statement of intended or desired use in the preamble of the claims (e.g., see claim 24). Additionally, applicant has neither defined the form, nor shape, nor size of the guide tube and the fuel rod. Absent these definitions, the

examiner interprets these limitations broadly and read them on any and all forms, shapes and sizes of guide tubes and fuel rods that can be accommodated and fixed in the lower tie plate of Freeman et al.

As to claims 28 and 30, applicant's claim language, "arrangement arranged in the nodes of the substantially regular network" reads on metal bars or strips 128. Again the limitation, "for laterally maintaining the lower ends of the fuel rod" is a statement of intended or desired use that Freeman et al. is capable of meeting.

As to claim 35, applicant's claim language, "feet" reads on leg 190. Again the limitation, "for support on a lower plate ..." is a statement of intended or desired use that Freeman et al. is capable of meeting.

As to claim 36, applicant's claim language reads on Freeman et al. as follows: a) "fuel rods" read on fuel rods 102; b) "skeleton" reads on the spacer grid 108; c) "upper terminal end piece" reads on top tie plate 104; d) "guide tube" reads on tie rod 136. The claim recites broadly the elements of fuel rods, skeleton for supporting rods and guide tubes, i.e., there are no limitations in regard to the fuel rod enrichment, the length and diameter of the rods, the shape and dimension of the so-called skeleton, etc. Absent these limitations, the above elements of the applied art correspond to the claim elements. Note further that the claim recites the guide tubes as connecting the upper and lower terminal end-pieces. The tie rod in the applied art also connects the top end plate and the lower end plate. Since the structure of the applied art is the same as that recited in the claim, the reference must inherently function in the same manner to produce the same results as applicant's situation. As to limitations which are

considered to be inherent in a reference, note the case law of In re Ludtke, 169 USPQ 563, In re Swinehart, 169 USPQ 226, In re Fitzgerald, 205 USPQ 594, In re Best et al., 195 USPQ 430, and In re Brown, 173 USPQ 685, 688.

As to claims 37 and 39, and the claim language "arrangement" see Fig. 2 and discussion on claims 28 and 30 above.

As to claims 47 and 48, see Fig. 2.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 31-33 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al. in view of Elkins (U.S. 6,690,758). Freeman et al. disclose the applicant's claim limitations except for the debris filter.

Elkins teaches a debris filter disposed on a lower tie plate (see Fig. 2). This debris filter corresponds to one of the components recited in the claims. The other of the two components reads on the cylindrical structures of the lower tie plate of Freeman et al. Again, the limitation, "for clamping between them the lower ends of the fuel rods" is a statement of intended or desired use that the above applied art is capable of meeting. Note that applicant has neither defined the form, nor shape, nor size of the lower end of

the fuel rod. Absent these definitions, the examiner interprets these limitations broadly and read them on any and all forms, shapes and sizes of fuel rod ends that can be clamped by the to components in the above applied art.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the apparatus, as disclosed by Freeman et al., by the teaching in Elkins, to include a debris filter to gain the advantages thereof (i.e., maintain the integrity of the fuel rods by preventing debris from abrading the rods), because such modification is no more than the use of a well known expedient within the nuclear art.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rick Palabrica whose telephone number is 571-272-6880. The examiner can normally be reached on 6:00-4:30, Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Keith can be reached on 571-272-6878. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rick Palabrica/
Primary Examiner, Art Unit 3663

April 5, 2010